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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,783	12/11/2003	Timo Kolehmainen	KOLS.075PA	8178
7590 09/17/2007 Hollingsworth & Funk, LLC Suite 125 8009 34th Avenue South Minneapolis, MN 55425			EXAMINER NEGRON, WANDA M	
			ART UNIT 2622	PAPER NUMBER
			MAIL DATE 09/17/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/733,783	Applicant(s) KOLEHMAINEN ET AL.	
	Examiner Wanda M. Negrón	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2007.
 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 1-24 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. In view of the amendment filed on 6/25/2007, the 35 USC § 112, second paragraph rejection of **claim 13** has been withdrawn.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. **Claims 1, 7, 10 and 22-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Smith (US 5,926,218).**

4. **Claims 1, 7 and 10** remain rejected under 35 U.S.C. 102(b) for the same reasons discussed in the previous Office action mailed 3/21/2007 (see Response to Arguments).

5. Method **claim 22** is drawn to the method of using the corresponding apparatus claimed in claim 1. Therefore, method claim 22 corresponds to apparatus claim 1 and is rejected for the same reasons of anticipation discussed in the previous Office action mailed 3/21/2007.

6. Regarding **claims 23 and 24**, Smith discloses that the image is captured in color via the image capturing subsystems of the first, i.e. a high resolution system that requires white balance which indicates an inherent color image output (see col. 5, lines

7-11), and the second type, i.e. a low resolution system with a color filter array (see col. 5, lines 7-11).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 2-6 and 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith (US 5,926,218).**

9. **Claims 2-6 and 8-9** remain rejected under 35 U.S.C. 103(a) for the same reasons discussed in the previous Office action mailed 3/21/2007 (see Response to Arguments).

10. **Claims 11-19 and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith (US 5,926,218) as applied to claims 1-10 above, and further in view of Denyer (WO 93/11631).**

11. **Claims 11-19** remain rejected under 35 U.S.C. 103(a) for the same reasons discussed in the previous Office action mailed on 3/21/2007 (see Response to Arguments).

12. Regarding **claim 20**, as discussed in the Office action mailed on 3/21/2007, Smith, as modified by Denyer, discloses all the limitations of the parent claim. However,

Smith does not teach that the imaging device comprises a sensor array divided between image capturing subsystem types, i.e. an image sensor with various sensing regions disposed on the same plane.

Denyer, on the other hand, teaches two or more cameras on one chip having the sensors in the same plane (see page 2, lines 11-18), thus obtaining cameras that are easy to calibrate while minimizing alignment problems (see page 2, lines 13-25).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to implement the sensor array disclosed by Denyer in the imaging system taught by Smith in order to obtain a camera system that is easy to calibrate and to minimize alignment problems.

13. Regarding **claim 21**, as discusses in the Office action mailed on 3/21/2007, Smith, as modified by Denyer, discloses all the limitations of the parent claim. In addition, Smith, as modified by Denyer, teach that the first type subsystem produces a color image, i.e. a composite image obtained from the monochromatic data (see Denyer, page 4, lines 27-32).

Response to Arguments

14. Applicant's arguments filed on 6/25/2007 have been fully considered but they are not persuasive.

15. Applicant submits on page 6 that the Smith reference does not teach or reasonably suggest "a controller configured to select the subsystem with which an

image is to be taken” since “both optical sections capture an image” at the same time.

The Examiner respectfully disagrees.

The Smith reference discloses that the low-resolution imager system, i.e. the second type subsystem, is used, *inter alia*, for monitoring/previewing purposes (see col. 3, lines 35-51), for live-scene image capture including “leading and trailing” (see col. 4, lines 59-64), and for determining exposure settings to be used with the high-resolution imager system (see col. 5, lines 1-8). All processes mentioned require image capture by the low-resolution imager system *before and/or after* capturing the image with the high-resolution imager system. Therefore, microprocessor 52, which controls both sensors drivers (see figure 1), inherently selects the imager subsystem required to capture an image for different camera processes, i.e. previewing, leading and trailing, exposure setting, and high-resolution output image capture. Furthermore, Applicant’s remarks are exclusively directed to a review process for verifying “that the exposure was correct for the high resolution image” (see col. 3, lines 61-65), and only for that purpose the low-resolution and the high-resolution systems capture the image approximately at the same time.

For the foregoing reasons, the rejection is still deemed proper and has been maintained.

Conclusion

17. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wanda M. Negrón whose telephone number is (571) 270-1129. The examiner can normally be reached on Mon-Fri 6:30 am - 4:00 pm alternate Fri off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2622

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Wanda M. Negrón/

Examiner, Art Unit 2622
September 12, 2007

A handwritten signature in black ink, appearing to read 'David Ometz', with a long horizontal stroke extending to the right.

DAVID OMETZ
SUPERVISORY PATENT EXAMINER